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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,521	01/08/2004	James Hoyt Beatty	TI-33868.1	8258

23494 7590 06/06/2006

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EXAMINER

LU, JIPING

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/754,521	BEATTY ET AL.	
	Examiner	Art Unit	
	Jiping Lu	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-34 is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/25/2006 has been entered.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Sarkozy (U. S. Pat. 4,573,431).

Sarkozy discloses a method of performing a liner change from an operating heated semiconductor furnace comprising removing a heated liner 80 from the operating heated furnace 10 with a fixture 16,18 (furnace fixture) while the operating heated furnace is in operation and heated; and inserting a replacement liner into the operating heated furnace same as claimed (col. 4, line 61 to col. 5, line 9).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarkozy (U. S. Pat. 4,573,431).

The method of performing a liner change of Sarkozy as above includes all that is recited in claims 15-21 except for the type and temperature of furnace and the liner removing and inserting rate. It would have been an obvious matter of design choice to use any desired furnace at any desired temperature and to remove and insert the liner at any desired rate in order to obtain the optimum result since applicant has not disclosed that the claimed furnace type and temperature and liner removing and inserting rate solve any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art.

6. Claims 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fig. 1 of applicant's admitted prior art in view of Severin et al. (U. S. Pat. 4,287,839) or Thomas (U. S. Pat. 5,835,525).

Fig. 1 of applicant's admitted prior art discloses a method of performing a liner change from an operating heated semiconductor furnace comprising removing a heated liner 14 from the furnace and inserting a replacement liner into the furnace. However, Fig. 1 of applicant's admitted prior art does not teach a method of changing furnace liner without shutting down the furnace. Severin et al. teach a method of changing furnace liner 1 with a fixture (see abstract and figures 1-3) without interrupting the operation of the furnace (col. 2, lines 6-11 and col. 4, lines

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1-12) same as claimed. Thomas teaches a method of changing furnace liner 8 with a fixture 14 without interrupting the operation of the furnace (col. 2, lines 3-6) same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the furnace liner changing method of Fig. 1 of applicant's admitted prior art to include a step of changing furnace liner with a fixture without interrupting the operation of the furnace as taught by Severin et al. or Thomas in order to reduce the time required for the replacement of the liner. With regard to the type and temperature of furnace and the liner removing and inserting rate, it would have been an obvious matter of design choice to use any desired furnace at any desired temperature and to remove and insert the liner at any desired rate in order to obtain the optimum result since applicant has not disclosed that the claimed furnace type and temperature and liner removing and inserting rate solve any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art.

Allowable Subject Matter

7. Claims 22-34 are allowed.

Response to Arguments


8. Applicant's arguments with respect to claims 14-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EHUD GARTENBERG can be reached on 571 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jiping Lu
Primary Examiner
Art Unit 3749

J.L.